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CLAIMS:

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1. A tap (4) including a tap body (6) within which is located a valve (14), an operating handle (12) mounted on the body and coupled to the valve, a security button (42) which is
5 interlocked with the handle and/or valve, the arrangement being such that the valve can only be opened after activation of the security button.
2. A tap as claimed in claim 1 wherein the body is provided with a first part spherical bearing surface (76) and the handle is provided with a complementary bearing surface
10 (104) whereby the handle is capable of biaxial rotation about vertical and horizontal axes (40,44).
3. A tap as claimed in claim 2 including outlet means (8,10), a chilled water supply line (24) and a cold water supply line 26 which are coupled to said valve and wherein on
15 rotation of the handle from a closed position about said vertical axis in a first sense to a first open position causes delivery of chilled water to said outlet means and, on rotation of the handle about said vertical axis in a second sense, opposite to the first sense to a second open position, together with operation of the security button from a locked position enables
20 rotation of the handle about said horizontal axis whereby water from said cold water supply line is delivered to a boiler unit (16) which in use causes boiling (or near boiling water) to be delivered to said outlet means.
4. A tap as claimed in claim 3 wherein the valve includes first co-operating valve elements (52,158,168) which open when the handle is moved to said first open position,
25 and second co-operating valve elements (52,144,170) which are aligned when the handle is moved to said second open position.
5. A tap as claimed in claim 4 wherein the valve includes third co-operating valve elements (135,190) which are opened by rotation of the handle about said horizontal axis
30 from an off position when the handle is in said second open position whereby, in use, water from said cold water supply line passes through said second and third co-operating

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valve elements to said boiler unit.

6. A tap as claimed in claim 5 wherein the valve includes a base plate (50) including first, second, third and fourth ports (140, 142, 144 and 146) therein and wherein said chilled water supply line (24) is coupled to the first port (140), said cold water supply line (26) is coupled to the second port (142), a cold water delivery line (30) is coupled to said third port (144), and a chilled water delivery line (28) is coupled to the fourth port (14).
7. A tap as claimed in claim 6 wherein valve includes a valve disc (52) which sealingly engages a valve face (153) of the base plate (50) and wherein the valve disc is mounted for rotation with the handle about said vertical axis.
8. A tap as claimed in claim 7 wherein the first co-operating valve elements include said valve disc and a ceramic insert (158) and wherein the valve face includes a recess (156) within which is located said ceramic insert (158), the insert including first and second bores (160,162) which communicate with said first and said fourth ports respectively and wherein the valve disc includes a recess (168) which provides fluid communication between said first and second bores when the handle is in its first open position.
9. A tap as claimed in claim 7 or 8 wherein the second co-operating valve elements include said valve disc and said third port (144) which opens to said face and wherein the valve disc includes a valve disc bore (170) which is aligned with said third port (144) when the handle is in said second open position.
10. A tap as claimed in claim 7, 8 or 9 wherein the third co-operating valve elements include a spigot (134) formed with said base plate and having a spigot bore (135) therethrough and a resilient valve element (190), the arrangement being such that said spigot bore (135) is in fluid communication with said second port and said resilient valve element is biased into sealing engagement with the spigot to close said spigot bore unless the handle is rotated about said horizontal axis.

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11. A tap as claimed in claim 10 wherein the valve includes movable body portions (172,174) which together with said valve base plate define a valve chamber (60) within which the valve disc and hollow spigot are located.

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12. A tap as claimed in claim 11 wherein the valve includes a diaphragm (176) which extends across said valve chamber and carries said resilient valve element (190).

13. A tap as claimed in claim 12 wherein the valve includes a plunger (58) the lower end (234) of which is coupled to the diaphragm and wherein the upper end of the plunger is pivotally connected to said handle, the arrangement being such that on rotation of the handle about said horizontal axis from said off position, the plunger is raised thereby unseating the resilient valve element from the spigot bore thereby enabling cold water from the cold water supply line to pass through the spigot bore, through the valve chamber, through the disc bore and through the third port.

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14. A tap as claimed in claim 12 or 13 wherein the diaphragm is clamped between said movable body portions.

15. A tap as claimed in claim 11, 12, 13 or 14 wherein the movable body portions are mounted for rotation with the handle about said vertical axis.

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16. A tap as claimed in claim 15 wherein an upper one (172) of said movable body portions is formed with pivot shafts (216) which are coupled to the handle (12) by means of a locking member (220) to thereby form a pivotal connection which permits rotation of said handle about said horizontal axis and rotation of the movable body portions (172,174) with the handle about said vertical axis.

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17. A tap as claimed in any one of claims 3 to 16 wherein the security button is mounted for reciprocating movement in a button opening (106) in the handle.

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18. A tap as claimed in claim 19 wherein a compression spring (114) biases the button to locked position which prevents rotation of the handle about said horizontal axis.

19. A tap as claimed in claim 18 wherein the body is formed with a cam member (80)
5 which co-operates with an interlocking projection (120) on said security button.

20. A tap as claimed in claim 19 wherein said cam member is formed adjacent to said first part spherical bearing surface and tapers in width, the arrangement being such that when the handle is in said closed position the cam engages said interlocking projection
10 (120) and prevents rotation of the handle from said off position about said horizontal axis whether or not the security button is moved from its locked position but, when the handle is rotated to said second open position and the security button is pressed inwardly to an unlocked position, the interlocking projection disengages said cam whereby the handle can be rotated from said off position about said horizontal axis.

15 21. A dispensing system for dispensing chilled water and boiling (or nearly boiling) water, said system including a tap as defined in any one of claims 3 to 20, and a boiler unit (16) having an input which is coupled to said cold water supply line and an outlet (20) which is coupled by means of a boiling water line (32) to said outlet means.

20 22. A system as claimed in claim 21 wherein the boiler unit (16) includes a vent outlet (22) which is coupled to said outlet means (8,10) by means of a vent line (34).

23. A dual valve (14) having a pair of valve elements (52,158) which are mounted for
25 rotation relative to one another and wherein one of the valve elements includes an inlet port (160) and an outlet port (162) and the other of the valve elements includes a recess (168), the arrangement being such that when the valve elements are rotated so that the recess overlies, at least in part, both of said ports, fluid can flow into one of the ports through the recess and out of the other port.

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24. A tap (4) having a handle (12) which is mounted for biaxial rotation, the tap including a valve assembly (14) which includes a plunger (58) and means (240) for coupling the plunger to the handle so that the plunger rotates with the handle about one axis (40) but is unseated from a valve seat (134) when the handle is rotated about an orthogonal axis (44).